

(Continued from page 3)

to interpret business-failure statistics, because the same states with large amounts of business formation also have large numbers of business failures.

Stevens, a professor at the University of Missouri, and coauthor of "LMI: An Agenda for Congress," addressed what isn't known about labor markets.

One of LMI's principal weaknesses is in the lack of information about change, Stevens said. For example, Stevens asked, what is the significance of "decoupling," or the fact that one's location while working is increasingly unimportant? And what about technological innovations, such as personal computers and cellular telephones, which have let us work from our homes or even our cars, he said.

Another problem with LMI is that there is always tension between today's urgent questions and the data available. In addition, there is "unevenness." We don't all deal with the same issues at the same time.

Stevens spoke of five aspects of labor market dynamics which would be valuable for policy makers that current LMI doesn't touch on or thoroughly explain.

(1) Simultaneous growth and decline of employment by area, industry, or occupation. When, how, and why people move from one occupation to another, from one labor market to another, or even from one industry to another.

(2) Turnover. Is the absence of turnover, for example, good or bad?

(3) Relocation. Wouldn't it be valuable to know the effect of two-earner families on the willingness of both earners to relocate for the advancement of one?

(4) Technology. What is the employment impact of each new advancement?

(5) What substitutions of capital for labor, or even labor for labor, result from minimum wage legislation? One major problem for LMI producers is one of functional ambiguity, Stevens said. LMI can be used for evaluation purposes, but because training program operators often do not want to be held accountable for their results, use of LMI to evaluate them is resisted.

For the first time the labor department is involved in something with enough lead time to influence the outcome.

*--Tom Plewes,
BLS Associate Commissioner*

Stevens also said that significantly more LMI might be obtained from employers today than, say, in the 1940s when many components of LMI were established.

There is a trade-off between intrusiveness and reciprocity, he contends, that may help LMI shops to gain access to more data. In other words, a survey once seen as intrusive, may now be acceptable, because employers may be willing to help the government in return for help the government might provide them. For instance, job training assistance might be welcomed when technology or foreign competition generates the need.

When pondering what new sensors LMI might set up, Stevens suggested LMI try to monitor the qualifications of those who move through a job. Despite the assumptions inherent in

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a career-information delivery system (CIDS), people come from a variety of sources and backgrounds to fill the same job, Stevens argued.

LMI could better inform education and training providers if it performed research of this type, he said. Equally interesting, he said, would be information tracking changes in the requirements of a job, or how the job evolves.

A Federal Perspective on Improving LMI

Tom Plewes, associate commissioner of BLS, outlined the national direction LMI would be taking over the next several years.

Plewes started by citing the department's initiatives for the year 2000, and noted that for the first time the labor department is involved in something with enough lead time to influence the outcome. In stating what these initiatives mean for LMI programs, he contends Congress expects us to be labor market analysts, not historians.

Analysis of demographic and labor market trends, according to Plewes, suggests five scenarios for the nation's future:

- (1) A new compact between employer and employee. The net effects will be: more flexible unions; employers using more leased labor; little or no premium pay for overtime, and the only way to increase personal income will be to work more hours; employers offering a cafeteria of benefits (employees may choose between day care for kids or health insurance, for example).
- (2) Labor shortages in low-paying, entry-level jobs (because of the shrinking youth cohort), and high-skill positions.



- (3) Aging labor force. The net effects will be: a more-productive, stable and less-mobile work force; fewer occupational shifts and less physical relocation; more delayed retirements because of opportunities from labor shortages.
- (4) Increasing numbers of women in the work force. The net effects will be: employers offering day care services; less-mobile families because the career impact on both working partners will have to be considered when relocation with promotion is offered to one; a temporary, instead of long-term, absence when women leave the labor force to start families.
- (5) Skill imbalances among the work force. Minorities will have greater opportunities than ever before, but a high proportion of them will not have acquired the necessary skills. This implies there will be a greater

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burden on small employers -- who have the fewest resources available -- to provide training.

What all this means for LMI, Plewes said, is a need for greater use of the Current Population Survey (CPS), but less information for local areas. Redesign of the CPS, which is currently used in the 11 most-populated states to determine employment and unemployment figures, will emphasize minority groups and de-emphasize small geography.

At the same time, nationally the BLS will focus on administrative data bases, Plewes predicted. This implies the ES-202 (wage and salary data) program will become more available for general use, and will be used by program administrators for revenue enhancement. In addition, industrial coding should improve.

The BLS effort to create a site-specific Business Establishment List, Plewes said, portends survival of those LMI units using the most advanced means. It will be necessary, he believes, to use computer-assisted data collection, including voice-recognition devices.

Another major LMI component BLS will emphasize will be the Occupational Employment Statistics (OES) survey. Plewes said OES coding will be based on the Standard Occupational Classification (SOC) code, which will be developed after the Dictionary of Occupational Titles (DOT) is updated in 1992.

The OES survey will be more general in nature, he said. Besides the occupational data currently collected, the OES survey will include gender, race, and wage data, and it will probably remain on a three-year cycle.

The fourth major component of the BLS LMI program will be a national Unemployment Insurance (UI) wage record data base. The present Permanent Mass Layoff and Plant Closing report will be subsumed into this data base, Plewes believes, but the data base would offer other information opportunities, as well. (Tracking of training program completers by Social Security number, for instance.)

To deal with labor shortages, Plewes recommended revival of the Job Openings and Labor Turnover Survey. This was a monthly survey of employers to determine the number of job vacancies, quits, layoffs, and other accessions and separations. The survey was terminated during the 1970s when BLS sustained major budget cuts.

Following the BLS perspective on the future of LMI, state representatives gave their reactions to the plans. A report on those reactions will follow in a later issue of this newsletter.

--Ron Simon,
Economic Analysis Manager

Input Sought on LMI Proposals

Readers are invited to offer their reaction to the LMI conference. Write to: Brent Fine, editor, Arizona LMI Newsletter, Site Code 733A, P.O. Box 6123, Phoenix, AZ 85005.

RA's Creation Gave More Visibility to Economic Analysis Programs

In an effort to give readers a better understanding of the functions of DES, Research Administration, starting in the April issue and continuing for the next several months the *Arizona LMI Newsletter* is taking an in-depth look at the data-gathering and analysis group that measures the state's economic pulse. Articles are focusing on the four units that make up Research Administration and the services they provide to the public and private sectors, plus looking at what the future holds for this five-year-old agency. This month, the Economic Analysis unit is discussed.

Second in a series

As pointed out in the April *Arizona LMI Newsletter*, some of the major reasons for creating Research Administration (RA) were to: reduce fragmentation in the collection and dissemination of economic information; develop a one-stop shopping center of data for the public, and private and government organizations; and bring together a staff with similar skills (data analysis, word process-

ing), where it would be easier to allocate resources and develop cross-training programs.

A less-publicized reason for creating RA, but also important, was an effort to give more visibility to programs that now make up the Economic Analysis and Data Systems units of RA. With the creation of a separate administration these programs would receive a similar level of recognition on the state level that their federal counterparts and funding sources -- the U.S. Department of Labor's Bureau of Labor Statistics, and Employment and Training Administration -- receive on the national level.

Prior to RA's creation in April 1984, the majority of functions that now make up the Economic Analysis unit of RA were part of the Labor Market Information (LMI) unit of DES' Employment and Training Administration (ETA) (Figure 1). Also included in the LMI unit was the

(Continued on page 8)

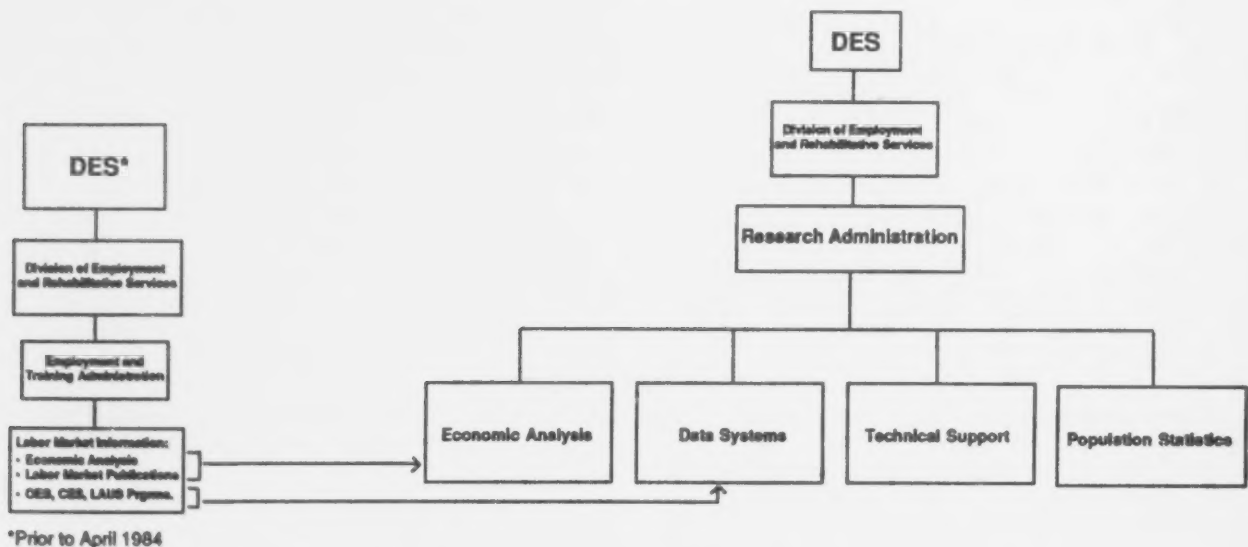


Figure 1. Partial Evolution of Economic Analysis Unit

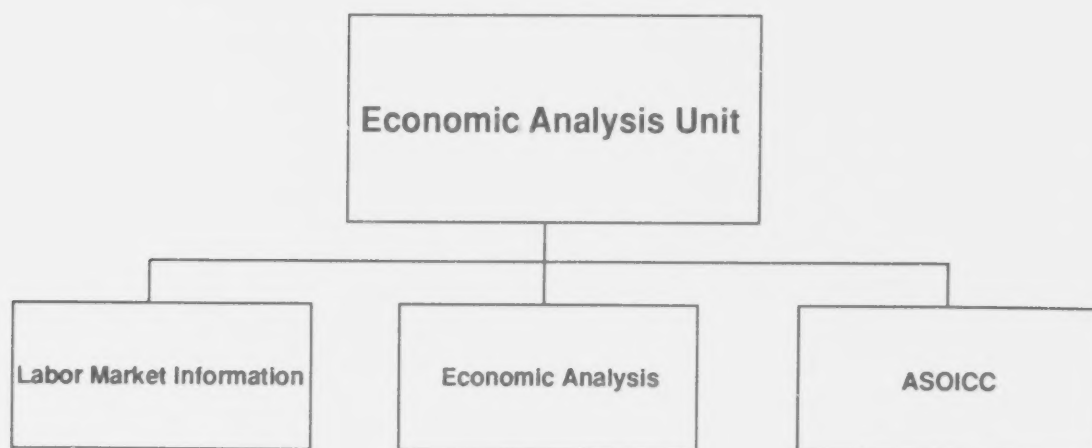


Figure 2. Research Administration, Economic Analysis Unit

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Occupational Employment Statistics (OES) and Current Employment Statistics (CES) programs, which are now under the Data Systems unit, along with the ES-202 (employment and wages) research program, which was brought over from DES' Unemployment Insurance Administration.

As its name implies, the Economic Analysis unit's basic function is to analyze and make projections about the state's economy. Some may say that equates to looking at crystal balls or throwing darts at walls. In real terms, however, for the nine-member staff it translates into the compilation, analysis and dissemination (through publications, press releases, data bases) of labor market data.

Who uses the data? a wide range of interest groups, including current and future job seekers; large and small businesses; vocational education and employment and training programs; and local, state and federal agencies involved in program planning.

To more easily accomplish its primary goal, the Economic Analysis unit has been divided into three sections (Figure 2) -- Economic Analysis (EA), Labor Market Information (LMI), and the Arizona State Occupational Information Coordinating Committee (ASOICC). (In this article the Economic Analysis section will be abbreviated "EA"; the entire Economic Analysis unit will be spelled out.)

For the most part, each Economic Analysis section works independently, but they are also dependent on each other's data for producing their final results. For example, ASOICC uses data gathered by the LMI section to project vocational employment in its publication, *Year 2000 Employment Projections*, while LMI needs industry forecasts by EA to make employment projections in its occupational forecast publications.

And while many of the functions of the Economic Analysis unit have not changed in the past 15 years,

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The Arizona Labor Force in March

The Arizona unemployment rate climbed to 6.0 percent in March despite an increase of 8,200 in total employment and a decrease of 2,300 in unemployment. Seasonal adjustment was responsible for the uptick, indicating March's employment gain and unemployment loss was less than expected.

Nonfarm wage-and-salary jobs increased 8,000, or 1,200 under the average-March gain since 1982. Over-the-year job growth from March to March was only 1.1 percent. (Arizona's January over-the-year growth was just under 1 percent, ranking Arizona 49th among states for wage-and-salary employment growth.)

Goods-producing industries of Manufacturing and Construction had some spring bounce, together adding 700 jobs, but their resilience was weak.

Construction's first monthly employment gain in six months was only 500, well below the 1,200 average-March gain during the economic expansion since 1982. Manufacturing's gain of 200 jobs was also well below the March average of 500 during the post-1982 expansion.

Despite the start of spring, the near-term outlook for Construction remains bleak. Although mortgage interest rates have not been rising as much as short-term loan rates, they have been rising enough to retard demand for new housing.

The construction-related industry of Finance, Insurance, and Real Estate (FIRE) posted a 100-job loss, reversing its direction after only one month of gain, following 11 months of continuous decline. Most of FIRE's losses, which are likely to

continue as interest rates rise, were in finance and insurance.

Another construction-related industry on the losing side in March was Transportation, Communications, and Public Utilities (TCPU). A 600-job loss was primarily in public utilities in northern counties.

While goods-producing industries were suffering less-than-normal employment growth in March, some service industries were growing by better-than-average amounts.

Trade added 2,900 jobs, of which 2,400 was in retail trade. Most of the growth was in department stores, food stores, and "other retail trade," a catch-all category made up of sellers of building materials, hardware, garden supplies, furniture, appliances, radios and televisions, flowers, tobacco products, and miscellaneous other retail items. Much of this activity was associated with preparations for Easter promotions.

The Services and Miscellaneous category enjoyed good growth in March. Hotels and lodging places equaled its March 1984 growth, adding 1,400 jobs, mostly in Maricopa and northern counties. Although the Arizona skiing season was coming to an end in March, last-chance sportsmen boosted demand for lodging services.

Business services, a group that normally loses employment in March, picked up 500 jobs instead. The gain was nearly all in temporary help services in the two urban counties.

In summary, March showed the continued deterioration of Arizona's economy, particularly in the goods-producing sectors.

--Ron Simon,
Economic Analysis Manager

Arizona Labor Force and Employment

March 1989 (in thousands)

	Arizona				
	Mar.* 1989	Feb. 1989	Mar. 1988	Amount Change	
				Feb.- Mar.	1988- 1989
TOTAL CIVILIAN LABOR FORCE**	1693.0	1687.1	1613.1	+5.9	+79.9
Total Unemployment	97.8	100.1	93.9	-2.3	+3.9
Rate	5.8	5.9	5.8	----	----
Rate (Sea. Adj.)***	6.0	5.9	6.0	----	----
Total Employment	1595.2	1587.0	1519.2	+8.2	+76.0

The Above Labor Force Statistics Should Not

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1437.7	1429.7	1422.5	+8.0	+15.2
Manufacturing	189.9	189.7	188.5	+0.2	+1.4
Durable Goods.....	145.4	145.7	145.6	-0.3	-0.2
Stone, Clay, and Glass.....	7.5	7.5	7.7	+0.0	-0.2
Primary and Fabricated Metals.....	15.7	15.8	15.5	-0.1	+0.2
Primary Metals.....	7.6	7.6	7.4	+0.0	+0.2
Fabricated Metals.....	8.1	8.2	8.1	-0.1	+0.0
Machinery.....	65.2	65.4	66.3	-0.2	-1.1
Other Durable Goods.....	57.0	57.0	56.1	+0.0	+0.9
Aircraft and Missiles.....	26.2	26.2	26.5	+0.0	-0.3
Lumber and Wood Product (Excluding Furniture).....	8.2	8.3	7.7	-0.1	+0.5
All Other Durable Goods.....	22.6	22.5	21.9	+0.1	+0.7
Nondurable Goods.....	44.5	44.0	42.9	+0.5	+1.6
Food and Kindred Products.....	9.3	9.2	9.0	+0.1	+0.3
Apparel.....	4.7	4.7	4.7	+0.0	+0.0
Printing and Publishing.....	17.0	16.9	16.7	+0.1	+0.3
All Other Nondurable Goods.....	13.5	13.2	12.5	+0.3	+1.0
Mining and Quarrying	12.0	12.1	11.8	-0.1	+0.2
Copper Mining.....	9.0	9.0	8.7	+0.0	+0.3
Other Mining and Quarrying.....	3.0	3.1	3.1	-0.1	-0.1
Construction	89.2	88.7	93.4	+0.5	-4.2
Trans., Communications, & Public Utilities	72.3	72.9	73.6	-0.6	-1.3
Transportation.....	36.3	36.1	36.6	+0.2	-0.3
Communications and Public Utilities.....	36.0	36.8	37.0	-0.8	-1.0
Trade	358.0	355.1	347.5	+2.9	+10.5
Wholesale Trade	69.4	68.9	68.4	+0.5	+1.0
Retail Trade.....	288.6	286.2	279.1	+2.4	+9.5
General Merchandise and Apparel.....	44.2	43.8	42.4	+0.4	+1.8
Food Stores.....	48.3	47.9	46.1	+0.4	+2.2
Automotive and Service Stations.....	35.0	34.9	33.5	+0.1	+1.5
Eating and Drinking Places.....	101.6	100.7	99.1	+0.9	+2.5
Other Retail Trade	59.5	58.9	58.0	+0.6	+1.5
Finance, Insurance, and Real Estate	91.4	91.5	94.8	-0.1	-3.4
Services and Miscellaneous	370.3	366.9	365.3	+3.4	+5.0
Hotels and Other Lodging Places.....	43.1	41.7	41.5	+1.4	+1.6
Business Services.....	77.6	77.1	78.9	+0.5	-1.3
Health Services.....	92.3	92.3	90.9	+0.0	+1.4
Other Services.....	157.3	155.8	154.0	+1.5	+3.3
Government	254.6	252.8	247.6	+1.8	+7.0
Federal.....	43.4	43.3	43.0	+0.1	+0.4
State and Local.....	211.2	209.5	204.6	+1.7	+6.6
School.....	121.2	120.0	120.0	+1.2	+1.2

* Preliminary

** Labor force, unemployment, and employment are reported by place of residence.

*** Normal seasonal variations have been eliminated to reflect underlying economic trends.

Arizona Labor Force and Employment

March 1989 (in thousands)

MARICOPA COUNTY					PIMA COUNTY				
Mar.*	Feb.	Mar.	Amount Change		Mar.*	Feb.	Mar.	Amount Change	
1989	1989	1988	Mar.	1988-	1989	1989	1988	Mar.	1988-
1047.7	1043.2	1001.6	+4.5	+46.1	320.4	319.4	304.5	+1.0	+15.9
50.5	50.8	48.9	-0.3	+1.6	15.8	16.3	14.9	-0.5	+0.9
4.8	4.9	4.9	---	---	4.9	5.1	4.9	---	---
4.8	4.8	4.9	---	---	4.9	5.0	4.9	---	---
997.2	992.4	952.7	+4.8	+44.5	304.6	303.1	289.6	+1.5	+15.0

Used for Economic Assistance Programs

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

945.1	940.3	938.2	+4.8	+6.9	252.7	251.4	250.1	+1.3	+2.6
138.9	138.6	137.2	+0.3	+1.7	29.6	29.8	30.8	-0.2	-1.2
107.9	107.9	106.9	+0.0	+1.0	23.7	23.9	25.1	-0.2	-1.4
4.9	4.9	4.9	+0.0	+0.0					
10.5	10.5	10.3	+0.0	+0.2					
52.5	52.6	52.9	-0.1	-0.4					
40.0	39.9	38.8	+0.1	+1.2					
31.0	30.7	30.3	+0.3	+0.7	5.9	5.9	5.7	+0.0	+0.2
6.0	6.0	5.9	+0.0	+0.1					
3.4	3.5	3.5	-0.1	-0.1					
12.0	11.9	12.0	+0.1	+0.0					
9.6	9.3	8.9	+0.3	+0.7					
0.7	0.8	0.7	-0.1	+0.0	2.0	2.0	1.7	+0.0	+0.3
61.0	60.8	64.1	+0.2	-3.1	16.0	16.0	17.2	+0.0	-1.2
50.3	50.3	50.3	+0.0	+0.0	9.0	9.0	9.2	+0.0	-0.2
26.9	26.8	26.5	+0.1	+0.4	4.5	4.5	4.8	+0.0	-0.3
23.4	23.5	23.8	-0.1	-0.4	4.5	4.5	4.4	+0.0	+0.1
242.3	240.6	235.6	+1.7	+6.7	58.2	57.8	56.8	+0.4	+1.4
55.2	55.0	54.2	+0.2	+1.0	7.1	6.9	7.0	+0.2	+0.1
187.1	185.6	181.4	+1.5	+5.7	51.1	50.9	49.8	+0.2	+1.3
28.2	27.9	27.7	+0.3	+0.5	7.3	7.4	7.3	-0.1	+0.0
31.5	31.4	29.6	+0.1	+1.9	8.1	8.0	8.0	+0.1	+0.1
22.3	22.1	21.1	+0.2	+1.2	5.4	5.5	5.4	-0.1	+0.0
65.2	64.7	63.7	+0.5	+1.5	18.9	18.7	18.4	+0.2	+0.5
39.9	39.5	39.3	+0.4	+0.6	11.4	11.3	10.7	+0.1	+0.7
72.8	72.8	75.5	+0.0	-2.7	11.7	11.8	12.3	-0.1	-0.6
249.4	247.2	247.2	+2.2	+2.2	70.2	69.7	68.6	+0.5	+1.6
26.4	25.4	24.8	+1.0	+1.6	7.1	7.0	7.2	+0.1	-0.1
60.5	60.2	62.7	+0.3	-2.2	11.8	11.7	11.4	+0.1	+0.4
60.0	60.1	59.6	-0.1	+0.4	20.0	19.9	19.3	+0.1	+0.7
102.5	101.5	100.1	+1.0	+2.4	31.3	31.1	30.7	+0.2	+0.6
129.7	129.2	127.6	+0.5	+2.1	56.0	55.3	53.5	+0.7	+2.5

NOTE: Prepared by the Arizona Department of Economic Security, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Mar.* 1989	Feb. 1989	Mar.* 1988	Mar.* 1989	Feb. 1989	Mar. 1988	Mar.* 1989	Feb. 1989	Mar. 1988
Manufacturing	399.67	404.67	402.37	40.7	41.0	41.1	9.82	9.87	9.79
Aircraft & Missiles	601.04	603.46	INA	44.0	44.0	INA	13.66	13.47	INA
Food & Kindred Prod.	345.06	336.88	353.23	40.5	40.2	39.6	8.52	8.38	8.92
Primary Metals	516.78	504.27	472.20	39.6	39.0	38.8	13.05	12.93	12.17
Machinery	386.89	401.17	401.44	39.6	40.4	41.6	9.77	9.93	9.65
Copper Mining	554.17	529.57	525.34	42.4	41.6	42.4	13.07	12.73	12.39
Construction	422.10	419.22	432.89	35.5	35.8	36.5	11.89	11.71	11.86
Utilities	663.41	692.41	632.10	40.8	42.9	42.0	16.26	16.14	15.05
Retail Trade**	246.89	246.24	246.75	32.7	32.4	32.9	7.55	7.60	7.50
Wholesale Trade	365.00	369.33	390.66	38.1	39.0	39.5	9.58	9.47	9.89

Estimated Hours and Earnings of Production Workers in Selected Industries Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Mar.* 1989	Feb. 1989	Mar. 1988	Mar.* 1989	Feb. 1989	Mar. 1988	Mar.* 1989	Feb. 1989	Mar. 1988
Manufacturing	428.22	435.97	428.69	40.9	41.6	41.3	10.47	10.48	10.38
Construction	442.26	440.03	453.36	36.4	36.7	37.1	12.15	11.99	12.22
Retail Trade**	266.01	268.93	269.01	33.6	33.7	33.5	7.87	7.98	8.03
Wholesale Trade	382.00	388.09	400.18	38.2	39.4	39.7	10.00	9.85	10.08

Estimated Hours and Earnings of Production Workers in Selected Industries Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Mar.* 1989	Feb. 1989	Mar. 1988	Mar.* 1989	Feb. 1989	Mar. 1988	Mar.* 1989	Feb. 1989	Mar. 1988
Manufacturing	370.33	369.79	368.26	38.4	38.6	38.9	9.59	9.58	9.52
Copper Mining	549.54	585.50	590.98	43.2	42.8	43.0	13.68	13.68	12.78
Construction	379.14	389.61	393.39	36.8	37.0	35.6	10.69	10.53	10.65
Utilities	574.56	580.27	586.45	42.1	41.3	42.0	13.93	14.05	13.68

* Preliminary

** Excludes eating and drinking places.

NOTE: These estimates are based on a sample of full-time and part-time production and related employees whose payroll and hours are reported for the pay period that includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

**Nonmetropolitan Counties
Labor Force and Employment
March 1989**

	Apache	Cochise	Coco- nino	Gila	Graham	Green- lee	La Paz
CIVILIAN LABOR FORCE*	15,550	35,025	42,350	12,725	8,425	2,950	5,650
Total Unemployment	2,450	2,650	3,125	1,450	750	250	550
Rate	15.8%	7.6%	7.4%	11.4%	8.9%	8.5%	9.7%
Rate (Seas. Adj.)**	16.6%	7.1%	7.6%	10.3%	8.8%	8.8%	9.9%
Total Employment	13,100	32,375	39,225	11,275	7,675	2,700	5,100

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

TOTAL WAGE AND SALARY	15,125	25,400	38,375	10,700	5,350	2,850	3,800
Manufacturing	800	1,275	2,825	1,350	200	50	350
Mining & Quarrying	50	125	175	1,275	0	1,550	100
Construction	875	850	1,600	600	225	200	200
T.C.P.U.	1,950	1,625	2,525	375	150	50	50
Trade	1,475	5,750	8,775	2,150	1,475	225	1,275
F.I.R.E.	325	725	950	275	100	25	100
Services & Misc.	4,250	4,825	9,650	2,050	900	150	925
Government	5,400	10,225	11,875	2,625	2,300	600	800

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	32,925	27,075	39,450	10,650	37,425	54,725
Total Unemployment	2,100	3,475	3,150	1,125	2,400	8,050
Rate	6.4%	12.8%	8.0%	10.6%	6.4%	14.7%
Rate (Seas. Adj.)**	6.1%	12.7%	7.9%	15.7%	5.7%	21.4%
Total Employment	30,825	23,600	36,300	9,525	35,025	46,675

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

TOTAL WAGE AND SALARY	22,900	19,975	31,450	10,075	25,375	28,850
Manufacturing	2,825	1,850	4,200	1,300	2,225	2,200
Mining & Quarrying	200	1,175	3,625	0	950	50
Construction	1,750	875	1,450	350	1,875	1,375
T.C.P.U.	1,125	1,675	925	575	900	1,075
Trade	6,875	3,900	5,575	4,225	6,875	8,950
F.I.R.E.	1,000	375	800	275	975	1,050
Services & Misc.	5,250	4,675	4,350	1,625	5,800	6,300
Government	3,875	5,450	10,525	1,725	5,775	7,850

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities

F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

**Arizona Labor Force and Employment
for Economic Assistance Programs
March 1989**

<u>County</u>	<u>Civilian Labor Force</u>	<u>Employment</u>	<u>Unemployment</u>	<u>Rate</u>
Statewide	1,692,997	1,595,159	97,838	5.8%
Apache	15,565	13,107	2,458	15.8
Cochise	35,024	32,373	2,651	7.6
Coconino	42,372	39,235	3,137	7.4
Gila	12,714	11,276	1,438	11.3
Graham	8,419	7,666	753	8.9
Greenlee	2,957	2,706	251	8.5
La Paz	5,645	5,106	539	9.5
Maricopa	1,047,705	997,160	50,545	4.8
Mohave	32,929	30,829	2,100	6.4
Navajo	27,084	23,610	3,474	12.8
Pima	320,342	304,561	15,781	4.9
Pinal	39,432	36,289	3,143	8.0
Santa Cruz	10,670	9,537	1,133	10.6
Yavapai	37,423	35,033	2,390	6.4
Yuma	54,715	46,671	8,044	14.7

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

RA Gave Economic Analysis Programs More Visibility

(Continued from page 8)

-- during several organizational changes -- there have been improvements along the way, says Economic Analysis Manager Ron Simon, who administers and makes major contributions to all sections. Until the mid-1970s there were no economists; now there are three. Rotary calculators were commonplace a decade ago, and all data had to be entered manually into office record cards, then later into a mainframe computer; now a highly technical forecasting model, available on micro-computer software, is used to project the state's employment and economic growth.

With the "move into the 21st century," Simon says jokingly, "We can

see the future perfectly." Most Arizonans would probably be happy with the next year, thank you.

The EA section consists of two economists -- EA Supervisor Jalal Ahmad and Marc Marra -- and receives extensive assistance from Simon. Among its tasks are: re-evaluating and adjusting the Arizona Economic Forecasting Model (see below), developing economic and employment forecasts twice a year, holding monthly press conferences and issuing press releases on the state's employment data, evaluating the performance in Arizona of the Job Training Partnership Act (JTPA) program, working with Research Administration's Population Statistics unit to ensure its projections are in line with employment forecasts, and giving input to legislative committees and commissions to help them

(Continued on page 15)

(Continued from page 14)

plan budgets for state and local agencies.

One major product of this section's labor is the annual employment and economic forecast and forecast update for the state as a whole, the two largest counties (Pima and Maricopa) and nonmetropolitan areas. The forecast and update, which are published in the March and September issues of the *Arizona LMI Newsletter*, include in-depth analysis of industries within the state and substate areas, along with a variety of related tables and charts.

Most of the forecasts are derived from the Arizona Economic Forecasting Model (AEFM), which measures various factors of the state's economy -- population growth, employment, unemployment, national economy -- to arrive at projections for the state's future economic growth. To properly track the state's economic health, the 250 equations that make up the AEFM are closely monitored and adjusted during the year.

The LMI section of Economic Analysis has three research analysts -- LMI Supervisor Barbara Keene, Glede Kohler, and Marcy Tomko.

LMI's primary function, says Keene, can be described in fairly simple terms. "We use data other units produce, add to it some of our own, analyze the data and disseminate it through various means -- publications, public appearances, telephone."

Some of the tasks that fall under this category are: conducting and publishing of annual wage surveys of small businesses (under 100 employees); supplementing large-em-

ployer surveys conducted by the Arizona Department of Administration; certifying that aliens offered jobs in Arizona are paid at least the prevailing wage in the area they're located; projecting occupational employment, and publication of occupational employment forecasts for each county and the state as a whole; and compiling planning information for the JTPA program, including publication of the *Annual Planning Information* guide, a compendium of economic data that is used by JTPA and other employment and training programs.

ASOICC ... is responsible for bringing together and coordinating Arizona's occupational information for vocational education programs and manpower services.

By far, LMI's major work involves producing new and revising old publications; particularly the *Annual Planning Information* guide, which takes about six months to prepare. All told, LMI is responsible for

about 50 publications, and may be working on new and revising as many as 20 publications at one time.

The final section of the Economic Analysis unit is ASOICC, which is responsible for bringing together and coordinating Arizona's occupational information for vocational education programs and manpower services, as well as developing occupational demand and supply data on vocational education.

Created by the Arizona Legislature in 1978, ASOICC is a state branch of the National Occupational Information Coordinating Committee (NOICC), which was established as part of vocational education laws passed by the U.S. Congress in the mid-1970s.

Since its inception, ASOICC has been tied to three state agencies -- DES, the Department of Education, and the Department of Commerce (formerly the Office of Economic Planning and De-

(Continued on page 16)

(Continued from page 15)

velopment) -- as part of an inter-agency agreement. But when Research Administration was created in 1984, ASOICC moved from its offices at the Department of Education to DES, primarily because it gives ASOICC easier access to labor market data it uses to produce publications and operate a data base.

ASOICC has a two-person staff, consisting of Executive Director Stan Butterworth, and the manager of its data base operation (MICRO OIS), Hugo Soll.

Butterworth, who has headed ASOICC since 1980, has several major responsibilities, including: administering and marketing of the ASOICC program; setting up career workshops for high schools and community colleges, job fairs, and community-based groups; writing and putting together occupational briefs and other publications; and coordinating programs within the three state agencies it serves. In addition to running the data base, Soll also produces numerous reports available to the public relating to the data base and DES Job Service activity.

One of ASOICC's major accomplishments, Butterworth says, has been the development of the MICRO OIS, a micro-computer data base that offers a wide variety of occupational information to vocational planners, job placement specialists, career counselors, personnel managers and students. Developed by Soll in 1986, the MICRO OIS is in its second version and has been installed in more than 50 locations throughout the state. (For more information on the MICRO OIS, read, *The 1988 MICRO OIS of Arizona - for Vocational Planning, Counseling, and Evalua-*

tion, or contact Soll or Butterworth.)

Working with all three sections and in coordination with Simon is the recently created position of administrative assistant. Filled by Brent Fine, the position is primarily responsible for editing and layout of Economic Analysis publications and operation of RA's desktop publishing system.

"The idea is to give a more professional look to our publications" and free up time for the LMI section to work on other projects, says Simon, adding that it's the first position added to RA in three years.

Simon, who has worked 15 years with the state's labor market data programs -- including eight as su-

pervisor of part of the LMI unit when it was under ETA -- believes the creation of RA has been a positive move because it's "easier to share data" among programs. In addition, the Economic Analysis manager says there's been a better association with groups involved with vocational education and the Arizona Department of Education with the move of ASOICC to DES.

As for the future, Simon believes Economic Analysis has the potential to offer more information to the public, provided there is adequate funding, which currently comes only from the federal government. "There is a great deal of data that have gone unanalyzed. There is potential for more analysis if there were more staff," Simon says.

In the June issue, RA's Technical Support unit will be discussed.

*--Brent Fine,
Arizona LMI Newsletter editor*

"There is a great deal of data that have gone unanalyzed. There is potential for more analysis if there were more staff."

*--Ron Simon,
Economic Analysis Manager*

New Developments

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the LMI Newsletter is not responsible for incorrect information reported from these sources.

MANUFACTURING - Several hundred jobs are expected to be created when Motorola Inc. opens a \$200 million semiconductor plant in Chandler. Construction of the plant, which will build sophisticated integrated circuits, has not been set. The plant will support Motorola's wafer fabrication facility in Mesa, which employs 600.

McDonnell Douglas Helicopter Co. in late April eliminated 355 jobs at its Mesa plant due to the winding down of production of Apache attack helicopters, the company said. Ninety-five jobs at its Culver City, Calif., operation were also terminated. The reductions, which are expected to save McDonnell Douglas \$16 million, are 5.7 percent of the helicopter company's work force.

Intel Corp. is expected to lay off 200 employees from its wafer-fabrication plant in Chandler starting in June. The cuts are part of company-wide reductions at Intel's five U.S. plants. Intel currently employs 2,700 at its Chandler operation.

W.A. Krueger Co. is moving its corporate headquarters from Scottsdale to Itasca, Ill., a suburb of Chicago. The move, which will consolidate the company's two administrative offices, will affect some management and clerical positions in the Phoenix area. The move will

have no bearing on Krueger's printing plant at 2802 W. Palm Lane in Phoenix, where *Arizona Highways* is produced. Some of Krueger's 70 employees in the Phoenix area are being offered severance packages. Krueger is being taken over by Ringier AG of Zurich, Switzerland, in June or July.

Moving into a new office and warehouse complex at 1555 W. 10th Place in Tempe will enable **Blue Chip International Inc.** to double its space and expand its manufacturing operation. Blue Chip will now be able to handle final assembly work on its personal computer products. Currently, all of its manufacturing is done in South Korea. The increased work load will mean the hiring of an additional 25 workers by the end of the year.

Arvin Industries Inc. of Columbus, Ohio, plans to sell its Phoenix-based **ArvinAir Division**, which builds portable electric heaters, and evaporative coolers. ArvinAir employs 1,100 people, who work in engineering, marketing and production.

Gentron Corp. has moved its corporate headquarters from Glendale, Wis., to Scottsdale. Gentron, which manufactures electronic parts for the military -- film-power circuits, motor speed controls --, plans to also expand its work force from 20 to 100.

CONSTRUCTION - The **Phoenix City Council** has given the OK to a \$70 million project to build a downtown arena and parking garage. The 18,000-seat arena will be used primarily by the **Phoenix Suns** professional basketball team, but will be available for other events. The city and Suns are splitting the cost of building the arena, which will be located on the southwestern corner of Third and Jefferson streets.

(Continued on page 18)

(Continued from page 17)

Construction has begun on the first of twin, 24-story office towers for the Greyhound Corporate Center at Central Avenue and Palm Lane in Phoenix. Greyhound Corp. will occupy two-thirds of the first building -- Greyhound Tower -- scheduled to open in two years. A 200-seat performing arts center, located between the two buildings, is also planned.

Work is under way on the second office tower of the Arizona Center, a \$515 million mixed-use project on 18.5 acres in downtown Phoenix. Pinnacle West, holding company for MeraBank, Arizona Public Service Co. (APS) and other subsidiaries, will occupy one-third of the 20-story, 322,000-square-foot building, located at 400 E. Van Buren St. APS occupies 17 of 20 floors in the first office building, Two Arizona Center, which opened March 1. It's located at 400 N. Fifth St. The Arizona Center, which is scheduled to be built over the next 13 years, will also feature a 100-store retail center.

TRADE - Concord, Calif.-based Office Club has opened the first of at least five office-supply stores planned for Arizona. The 22,000-square-foot store, which offers discounted office products, is in a converted warehouse at 220 S. Ninth St. in Phoenix. Three other Valley locations and one in Tucson are planned for later this year or early 1990.

FINANCE, INSURANCE and REAL ESTATE - American Continental Corp., which owns two resorts in the Valley (including the lavish Phoenician) and is involved in other development projects, filed for reorganization under federal bankruptcy laws in mid-April. One of the largest real estate and financial services companies in the Valley, American Conti-

ental said it was forced to take this action because the Federal Home Loan Bank Board was about to take over (and later did) Lincoln Savings of Irvine, Calif., which American Continental owns and was trying to sell. Federal regulators claim American Continental was severely risking the health of Lincoln, by tapping its \$5.4 billion in assets for risk-oriented investments. American Continental, which has lost \$35 million since Sept. 30, claims it is being unfairly harassed and would not be able to continue its projects without the sale of Lincoln. American Continental employs about 3,000 people -- down about 10 percent from January -- at its resorts, company offices in Phoenix, and subsidiaries.

The state's second largest thrift, Western Savings and Loan Association reported a \$100 million first-quarter loss, which comes on the heels of a \$201 million loss in 1988. The loss, blamed on a poor Valley real estate market, dropped Western's capital below federal guidelines. It's unlikely the financial institution will be able to avoid insolvency without new capital, Western's chairman, Robert W. Stallings, said.

Arizona Bank and its 99 branches have been renamed Security Pacific Bank Arizona by its parent company, Security Pacific Corp. of Los Angeles. Security Pacific, which has owned Arizona Bank since October 1986, has not indicated there will be any employment changes.

TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES - Salt River Project (SRP), the state's second-largest utility, is eliminating nearly 800 full-time positions -- 13.5 percent of its staff -- 500 of which will be cut by Sept. 1. The \$50 million cost-cutting move means the elimination of 340 hourly and 295 salaried and non-supervisory

(Continued on page 19)

(Continued from page 18)

jobs, plus 156 management positions. About two-fifths of the cuts, however, will be eliminated by not filling vacant positions and through voluntary severance. Overstaffing was given as the primary reason for the layoffs. One area particularly hard hit by the SRP layoffs is St. Johns, a town of about 4,000, 45 miles northeast of Show Low near the New Mexico border. Between 65 and 70 positions at the Coronado Generating Station in St. Johns are being eliminated.

Three airlines announced plans to expand or open reservation centers in the Valley. Seattle-based Alaska Airlines is moving its Long Beach, Calif., reservation center to Phoenix. Many of the 100 employees in Long Beach may move with the company to a reported 70,000-square-foot facility in Phoenix, but it's likely there will be hiring locally with plans for future expansion. Meanwhile, Valley-based America West Airlines is adding 120 part-time employees to its 580-employee reservation center in Tempe. And Southwest Airlines expects to add 50 to 60 more employees to its Phoenix reservation center that already employs 305.

SERVICES AND MISCELLANEOUS - Ramada Inc. of Phoenix is selling its 825 worldwide hotels to New World Development Co. Ltd., which has agreed to then transfer control to most of the properties to Prime Motor Inns Inc. of Fairfield, N.J. Ramada officials have not said what will happen to its headquarters and reservations center in Phoenix, which employs 675 people.

Sears, Roebuck and Co. plans to open a telephone catalog-sales center in Tucson in July. The center, which will use 40,000-50,000 square feet in the Butterfield Technical Center, is expected to employ between 800 and 1,100 people. The jobs are ex-

pected to pay between \$5 and \$7 per hour, with "handsome fringe benefits." Sears' move follows on the heels of an announcement by First Data Resources of Omaha, Neb., which will open a telephone-based data processing company in Tucson this summer that will employ 850 people. (See April 1989 Arizona LMI Newsletter.)

CPS Direct Marketing, a subsidiary of Carson Pirie Scott & Co., a retail and speciality store chain, is up for sale. CPS, which employs about 700 people in Phoenix that are involved in catalog and direct mail sales, lost \$15 million in 1988. A company official declined to say what will happen to CPS or its employees.

Scottsdale-based PCS Inc., which processes prescription-drug claims for insurance companies, might be adding 400 to 500 positions next year. The additional jobs will depend on whether PCS lands a federal contract to administer prescription-drug benefits for Medicare enrollees, which would take effect in January 1991. In the interim, PCS will hire 40 to 50 people to prepare its bid and create an operating network.

Mattel Toys is moving its data center for worldwide operations from Los Angeles to Cave Creek. Mattel has purchased a 16,000-square-foot building in the Cave Creek Industrial Center. The data center will employ 30 people.

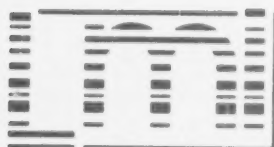
DHL Worldwide Express is studying the possibility of moving its customer service operation from Redwood City, Calif., to Tempe. The move, although not official, could take place by mid-July and lead to employment of 375 people, with an additional 125 workers being hired within the following 12 to 18 months.

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LABOR MARKET INFORMATION NEWSLETTER

Vol. XIII No. 6
June 1989

Unemployment Rate

Seasonally Adjusted
April*

ARIZONA	-	5.8%
Maricopa County	-	4.8%
Pima County	-	4.9%
UNITED STATES	-	5.3%

Consumer Price Index

U.S. - April 1989
Base = 1982-84

Wage Earner/Clerical Worker	-	121.8
% Chg. Year Ago	-	5.3
All Urban	-	123.1
% Chg. Year Ago	-	5.1

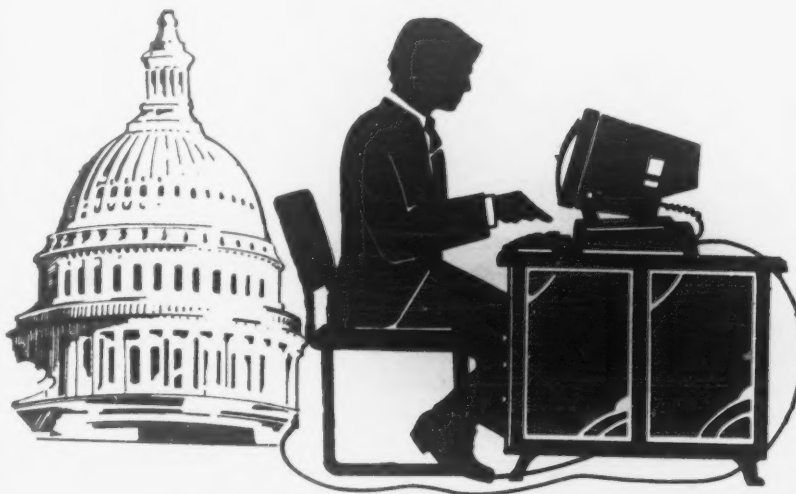
Phoenix - 1st Qtr 1988
Base = 1982-84

All Urban	-	123.7
% Chg. Year Ago	-	5.4

Tucson - 1st Qtr 1989
Base = 1982-84

All Urban	-	125.2
% Chg. Year Ago	-	3.6

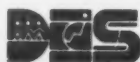
* Preliminary



Tapping into the Federal Marketplace, P.2

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Arizona Network Gives Small Firms Helping Hand

Provides Data Base, Technical Assistance to Court Uncle Sam's Business

Since the U.S. government is one of the world's largest purchasers of goods and services, it makes sense that companies would court its business. Many small and minority-owned businesses, however, are not aware of the opportunities available or procedures required to obtain contracts with the federal government.

According to a study by the Northeast-Midwest Congressional Coalition, a legislative subcommittee that studied the impact of federal procurement dollars on local communities, for every million dollars in federal purchases, 35 jobs are created or retained. Federal agencies located in Arizona spent \$2.1 billion on procurement contracts in 1986. More than half of that amount (\$1.24 billion) went to out-of-state companies.

One tool available to help companies compete for government contracts is a Government Procurement Outreach Center (GPOC). Its purpose "is to provide detailed information and personal instruction to companies, thereby increasing their chances of successfully selling their product or service to government agencies and to government prime contractors in the private sector."¹

**ARIZONA LMI NEWSLETTER
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**Brent Fine, Editor
Linda Van Calcar, Word Processor**

The Department of Defense, through the Defense Logistics Agency, is sharing the cost of supporting procurement-assistance programs operated by state and local governments and private nonprofit organizations, and encouraging the establishment of new programs.

Each program provides services tailored to the needs of the local area. Some of the more common services offered are:

APTAN is a business retention and expansion tool providing direct technical and marketing assistance to small and minority-owned businesses interested in contracting with federal, state, and local governments ...

- . matching products or services with appropriate government agencies.
- . assisting in the completion of required government forms.
- . locating and providing specifications and standards necessary to complete bid packages.
- . marketing companies to prime contractors for potential subcontracts.
- . identifying sources of financial assistance.

The lone GPOC program in this state is the Arizona Procurement Technical Assistance Network (APTAN), which was established in November 1986 as a network of business-, technical-, and marketing-assistance centers designed to accomplish two distinct economic-development objectives.

Primarily, APTAN is a business retention and expansion tool providing direct technical and marketing assistance to small and minority-

(Continued on page 3)

Pima County Center
Tucson Economic Development Corp.
465 West St. Mary's Road, Suite 200
Tucson, AZ 85701-8268
(602) 623-3709

Maricopa County Center
Phoenix Chamber of Commerce
34 West Monroe St., Suite 900
Phoenix, AZ 85003
(602) 254-5521

Cochise County Center
Sierra Vista Economic Development Foundation
500 East Fry Blvd., Suite M6
P.O. Box 2380
Sierra Vista, AZ 85635
(602) 459-6071
Douglas: (602) 364-4451

City of Flagstaff
101 West Santa Fe
Flagstaff, AZ 86001
(602) 774-4505

Yavapai County Center
Prescott Area Economic Development Corp.
1500 E. Highway 69
P.O. Box 671
Prescott, AZ 86302
(602) 445-2290
Cottonwood: (602) 634-2246

Yuma County Center
Yuma Economic Development Corp.
377 Main St., Suite 202
P.O. Box 1750
Yuma, AZ 85364
(602) 783-0193

Figure 1. Arizona Procurement Technical Assistance Network (APTAN) Offices

(Continued from page 2)

owned businesses interested in contracting with federal, state, and local governments and their major prime contractors. In addition, the network helps recruit new businesses to the state by compiling information on manufacturing, construction, and service-producing businesses in the state.

APTAN, headquartered at the Tucson Economic Development Corp., is sponsored by the Department of Defense (\$150,000 grant in September 1988), Arizona Public Service Co., US West Communications, The Knight Foundation, Job Training Partnership Act, and cities and counties in Arizona. In addition to the Tucson office, other state Procurement Technical Assistance Centers are operational in Cochise, Coconino, Maricopa, Yavapai, and Yuma counties (Figure 1).

The Arizona program is administered by a central statewide program manager, Mick Walker. But to insure technical uniformity and reduce operating costs, responsibility for the scope and direction of each center is placed within individual local offices.

A major feature of APTAN is the Arizona Automated Vendor Inquiry System (AAVIS), a data base of manufacturing, manufacturing-support, construction and service-related businesses in the state. Started in December, AAVIS is a medium of advertising for business' goods or services, as well as a service for commercial and government contractors seeking vendors. There is no cost for users of the system.

Procurement specialists at each center are continually compiling profiles of businesses, and entering that information into AAVIS. By the end of 1989, an estimated 25,000 profiles are expected to be included in AAVIS, says Walker, who adds, "It (AAVIS) is the only data base of its kind in the country."

Companies wanting to be included in AAVIS can do so by completing a questionnaire. Each profile includes a company name, address, phone number, and product and service capability information, including quality assurance programs, business size, major customers, and other useful information.

(Continued on page 4)

06/05/1989 Search Phrase: plumbing

Companies: 11 AAVIS

COMPANY: Name
Street Address
City, State, Zip Code
COUNTY: PIMA

CONTACT: xxxxxxxx
PHONE: xxxxxxxx

EMPLOYEES: 2
INCORPORATED: N
PARTNERSHIP: N

ANNUAL SALES: 35,000.00
INDIVIDUAL PROPRIETORSHIP: Y
WOMEN OWNED: N

FOUNDED: 1986
MINORITY OWNED: Y
SMALL BUSINESS: Y

SERVICE OR COMMODITY SPECIALTIES:

We specialize in air conditioning sales, refrigeration sales, heating sales, evaporative cooler sales, water heater sales, air conditioning service, refrigeration service, heating service, evaporative cooler service, water heater service, and air conditioning installation, refrigeration installation, heating installation, evaporative cooler installation, water heater installation. We also include sheet metal, electrical, and plumbing services associated with trade.

Figure 2. Example of Response on AAVIS Network if Searching for Small Plumbing Businesses in the Tucson Metropolitan Area.

(Continued from page 3)

AAVIS is accessible by computer through a modem-linked telephone line to any contracting officer or site-selection executive in the United States. The user-friendly program allows an interested buyer to enter information about products or services needed, then the program scans the data base and presents profiles on the businesses capable of fulfilling those needs. (Businesses or federal agencies can also contact directly the nearest technical assistance center and receive help from a staff member.)

Another program available through AAVIS helps businesses locate potential contracts. The program, called Protech/Bidmate, matches local businesses with state and federal contracting opportunities nationwide. As the computer makes matches, businesses are informed of upcoming contracts. Bidding packets are ordered, and the companies are assisted throughout the procurement process.

In addition to the two programs mentioned, AAVIS will eventually include a data base with profiles on a large number of Arizona cities. Each profile will have information on cities' demographics, tax structure, transportation, and wages. Also, AAVIS could be a valuable resource for job counselors or individuals wanting background information on potential employers.

Besides AAVIS, APTAN has a library of military specifications and federal regulations that will be provided in printed form to companies on a 24-hour emergency and 72-hour, regular-need basis.

--Barbara Keene,
Labor Market Information Supervisor

- 1 Sandra Stenzel, "A Government Procurement Outreach Center as an Existing Business Development Tool," Economic Development Review, Winter 1988, p. 33.

Technical Support Unit Provides Computer Expertise, Assorted Research for RA

In an effort to give readers a better understanding of the functions of DES, Research Administration, starting in the April issue and continuing for the next several months the Arizona LMI Newsletter is taking an in-depth look at the data-gathering and analysis group that measures the state's economic pulse. Articles are focusing on the four units that make up Research Administration and the services they provide to the public and private sectors, plus looking at what the future holds for this five-year-old agency. This month, the Technical Support unit is discussed.

The Technical Support unit of Research Administration (RA) can be compared to the proverbial "unsung hero." Although Technical Support is RA's smallest unit in terms of employees (5), and its work does not

receive the exposure of RA's other units, the functions and expertise the unit provides put it on par with RA's larger units.

Technical Support has two primary functions -- performing a variety of research tasks, and overseeing RA's computer operation. Without the latter, it would be nearly impossible for RA's four units to perform their primary task of collecting, analyzing and disseminating labor market information.

Technical Support Manager Bill Bowen says his unit's goal is to lend assistance to projects that RA's workers lack the time or expertise to complete -- be it computers or other research. Bowen, who has spent all of his 10 years in state service working with labor market information, likes to think of his staff as "researchers at large."

Heading up Technical Support's research department is Supervisor Stan Gorodenski, who has a staff of two research and statistical analysts,

(Continued on page 6)

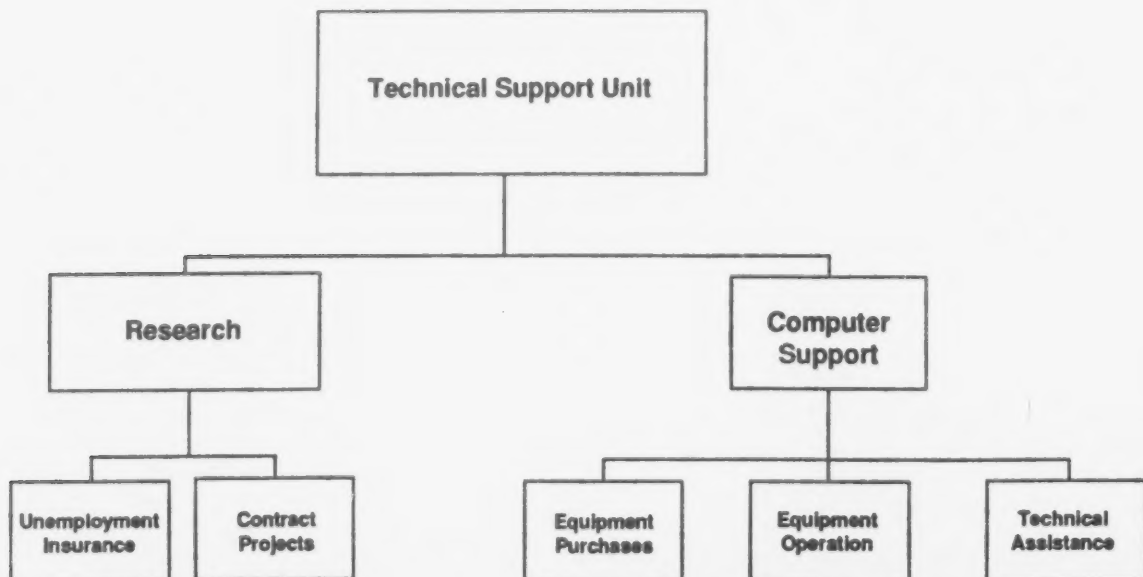


Figure 3. Functions of Research Administration, Technical Support Unit

(Continued from page 5)

Nezhat McCain and Don Davignon. Also performing U.I. research is Cindy Smith, a research and statistical assistant who reports directly to Bowen.

For the most part, research provided by Technical Support involves data relating to Unemployment Insurance (UI), which by no coincidence is the DES division where Gorodenski came from prior to RA's creation.

UI research can be broken down into two areas -- long- and short-range economic forecasts, and contract work.

Long-range forecasts are used to predict the future work load of the state's UI program and solvency of the UI Trust Fund. The estimates aid the federal government in determining how much money needs to be allocated to run the state's UI offices the following fiscal year, and help the state Legislature determine the maximum UI benefits Arizona can pay to displaced workers when various economic scenarios are considered.

Aiding in the long-range projections for the UI Trust Fund and work load are the development and maintenance of economic forecasting models and data bases, which have been set up by Gorodenski and McCain. Data on the Trust Fund are updated quarterly, while the work load information is revised monthly.

Technical Support's short-term research involves compiling monthly data on general UI activity in Arizona. Included in this information are: the number of UI claimants, the average time of unemployment, the amount of benefits paid, and the UI

Trust Fund balance. All told, Technical Support generates nearly 40 computer reports that are sent to the federal government and UI management in Arizona to keep track of how efficiently the state's UI program is operating.

Contract research is additional work Technical Support is assigned from special projects RA bids on or is requested to do by a government agency or a public or private organization.

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*--Bill Bowen,
Technical Support Manager*

Currently, a major part of the contract research Technical Support is performing involves conducting tests for the Permanent Mass Layoff and Plant Closing (PMLPC) program, which the Bureau of Labor Statistics (BLS) is using to determine what happens to displaced workers -- after they've been laid off. Part of the

research involves contacting an employer when 50 or more of its workers apply for UI benefits within a three-week period, to verify if the company has had a permanent mass layoff or has just been steadily laying off workers.

Technical Support is also presently doing contract research for a private company to help estimate the potential supply of agricultural labor workers among unemployed individuals in Arizona. This study is related to the Immigration Reform and Control Act that was passed by Congress a few years ago.

The second major area of responsibility of Technical Support is overseeing RA's computer operation -- from purchasing and maintaining equipment to providing assistance to all users.

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Bowen says it was determined when RA was created in 1984 that to be consistent and avoid wasting funds, there would be "one person who would make priority decisions" regarding computer equipment, and act as liaison between RA and the Office of Data Administration, where purchases of DES equipment are approved. As head of Technical Support and having 20 years of computer experience, Bowen was the natural choice.

Besides deciding purchases, Technical Support's other computer-related responsibilities include keeping operational RA's, personal computers, local area network (LAN) and printing devices, plus giving support to RA's computer users.

"Most everyone in the (Technical Support) unit provides technical help" to RA's staff, says Bowen, who also teaches a DES-wide class covering the department's policy on protection of DES data, and computer hardware and software.

As for Technical Support's future, Bowen says a high priority will be given to providing a personal computer at each desk in RA, which will allow users to access software programs currently not available on the mainframe computer. By doing that, "productivity will be increased and it will free up more time for analysis (of data)," he says.

Bowen is also hopeful his staff can be increased. Technical Support is currently operating with three fewer people than the unit requires. This has led to a reduction in the research the unit can perform, Bowen says.

RA's Population Statistics unit will be discussed in the July issue of the Arizona LMI Newsletter.

--Brent Fine
Arizona LMI Newsletter Editor

OES Unit to Collect Data on Manufacturers, Hospitals for '89 Survey

Manufacturing and hospital establishments are the target of the 1989 Occupational Employment Statistics (OES) survey in Arizona.

The OES program is a federal-state cooperative effort that determines by industry each state's current and future demand for occupational employment.

For 13 years, the OES unit of DES, Research Administration, has been collecting data with the support of the Arizona business community. Employment information from the OES program has become an integral part of Arizona's education and occupational planning efforts.

Employers, planners and other users have access to the completed data through the *Occupational Employment Forecasts*, yearly publications for each county that detail the current and expected demand for occupations; and through the *Occupational Profile* series on major industries in the state. Career guidance counselors, students, and other users also have access to the final data through the MICRO OIS, a data base developed by the Arizona State Occupational Information Coordinating Committee (ASOICC) that is available at more than 50 locations in the state.

Data for this year's survey will be collected in person from large employers (more than 100 employees). Small employers can complete the survey by filling out a form, or over the phone by calling 1-800-321-0381 (outside metropolitan Phoenix) or 542-6485 (inside the local area).

--Cyprian Eboh,
OES Supervisor

Four Arizona Cities Make List of Top 'Micro Areas'

Four Arizona cities are ranked among the top 25 fastest-growing "micropolitan areas" in the country, according to an article in the May issue of *American Demographics*.

A micropolitan area is defined as a single county with at least 40,000 residents, including a core city with at least 15,000 residents, or an independent city with a population of 15,000.

The combined area of Bullhead City-Lake Havasu City ranked second out of 219 micropolitan areas in population growth between 1980 and 1986 with an increase of 37.1 percent; Prescott was ninth in population growth with a rate of 24.4 percent; and Flagstaff, 22nd, with a growth rate of 14.8 percent. The fastest growing micropolitan area was Rio Rancho, N.M., at 48.6 percent.

Prescott and Bullhead City-Lake Havasu City also ranked high among micropolitan areas with older populations. Prescott was second, with a median age of 39, while Bullhead City-Lake Havasu City was fourth, with a median age of 37. Flagstaff, on the other hand, had one of the youngest populations (8th), with a median age of 23.2. Flagstaff also was tied for 11th with five other areas in the "most educated" category, with a median of 12.8 years of school completed among people age 25 and above.

Micropolitan areas, a term coined by the article's author, G. Scott Thomas, are important because they are "are under-served markets deserving of more business attention."

Other distinguishing features of micropolitan areas, Thomas says, include:

- a median age below the national rate.
- more than half are within 50 miles of the center of a metropolitan area.
- a minority population smaller than the national average.
- often are the home of college towns, military bases, and retirement communities.

LMI Publications -- Hot off the Press

The following recently revised publication prepared by DES, Research Administration, can be ordered from the address on the back of this newsletter or by calling (602) 542-3871. One copy of the publication will be sent at no charge; multiple copies at a nominal charge to help cover the cost of printing. Other DES offices can order directly from DES supply.

The 1988 *Small Employer Wage Survey* for Maricopa and Pima counties (PAL-331 and PAL-336) lists the hourly low, high, and average wage paid in various occupations by companies with fewer than 100 employees.

Wage information is given for the following industrial categories: Construction; Manufacturing; Transportation, Communications, and Public Utilities; Wholesale Trade; Retail Trade; Finance, Insurance, and Real Estate; and Services.

Also provided in each book are a summary table that aggregates the wage data across industries, analysis of wage structure in relation to the economy, and occupational definitions.

The Arizona Labor Force in April

Arizona's unemployment rate edged down to 5.8 percent in April, from 5.9 percent in March, while the nation's rate climbed from 5.0 percent to 5.3 percent.

The Arizona rate declined as 17,100 more residents found jobs and 4,600 dropped from the ranks of the unemployed, netting a modest increase in the labor force. The Arizona labor force grew 12,500 in April compared to 22,000 in the same month last year.

In April, an indicator of Arizona's slow growth was weaker payroll employment growth. Payroll employment increased 3,200, for only a two-tenths of a percentage point growth rate over the month. The average monthly gain in payroll employment in April during the last five years has been about 10,000.

The service-producing sectors continue to add most of the jobs, while the goods-producing industries added few.

In the goods-producing sector, only Manufacturing showed a slight growth in employment (300). All of the growth was in the nondurable goods sector, especially in food and kindred products.

Among durable goods, the machinery sector posted a loss of 400 jobs in April, adding to March's loss of 500. The loss in machinery employment was offset by an increase of 100 in employment in the defense-related aircraft and missiles industry, and 300 in all other durable goods. The aircraft and missiles industry has been losing jobs for more than two years, and its outlook remains poor as the effort to

reduce the federal budget deficit continues.

Construction, after a one-month spurt in March, continued its downward trend in April as a total of 300 jobs were lost. Usually, construction jobs increase during the spring months, but employment has slumped for the last two spring seasons. During the last 12 months ending in April, Construction has lost a total of 3,700 jobs, and in the prior year it lost 10,400.

On the positive side, job losses of 3,700 over the year may indicate that the rate of decline has slowed. On the negative side, there still exists a sufficient inventory of office and multifamily housing space, and higher interest rates may stall any chance of a rebound in Construction this year.

Employment in Mining, after holding at 12,100 during February and March, declined in April by 100. Further declines in this industry are not expected in the near-term.

In the service-producing sectors, Trade showed most of the strength; followed by Services; and Finance, Insurance, and Real Estate (FIRE). Employment in retail trade increased by 1,400 in April, whereas the average gain in this industry in the last five years was 1,300. Most of the gains registered in April were in general merchandise and apparel (500) and "other retail trade" (400).

Services-industry employment growth usually slows with the end of the winter tourism season in May, but this year it began to slow in April. Services added only 1,300 new jobs in April, for a 1.9 percent growth rate over the last 12 months. The average gain in April for the last five years has been more than 4,000.

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